

ASSET	DESCRIPTION OF ASSET APPLICATION FOR SCENARIO DEVELOPMENT
SOURCE SHIFTING	<ul style="list-style-type: none"> <li>♦ <u>MWD</u>: 60,000 af (2000 Ops)</li> <li>♦ <u>Kern County Users</u>: 50,000-90,000 af (2000 Ops)</li> <li>♦ <u>Core Peak</u>: Pay user to shift demand to alternative source</li> <li>♦ <u>Groundwater Substitution</u>: Shift surface water users in the Sacramento Valley to groundwater</li> <li>♦ <u>Crop shifting in Delta</u>: Shift to less water intensive crops during certain time periods</li> </ul>
GROUNDWATER STORAGE SOUTH OF THE DELTA (WATER ACQUISITION)	<ul style="list-style-type: none"> <li>♦ <u>Kern Water Bank</u>: Potential for 100 kaf on annual basis for three years if first years of a drought; 90,000 aft in years that KCWA gets 100% allocation in wetter years. Use former in emergencies, and in early years of EWA.</li> <li>♦ <u>Vidler Water Company</u>: Opportunities include lease of groundwater storage space (49,000 af), and water acquisition (6,300 af)</li> <li>♦ <u>Semitropic</u>: Potential for approximately 100 kaf – possibly more (at 20 kaf/month in/out)</li> <li>♦ <u>Options</u>: Acquire options on water north and south of the Delta</li> </ul>
INCREASED BANKS PUMPING CAPACITY	<ul style="list-style-type: none"> <li>♦ Increase pumping capacity by 500 cfs in year 2000 (70,000-90,000 af)</li> <li>♦ Increase pumping capacity to 6.6 kcfs Nov – March + 1/3 SJR.</li> <li>♦ Increase pumping capacity to 8.5 kcfs July – Sept</li> <li>♦ Increase pumping capacity to 7.1 kcfs July - Sept</li> </ul>
FLEXING E/I RATIO	<ul style="list-style-type: none"> <li>♦ Options include shifting averaging period from 14 days to 3 days without changing ratio itself; or relaxing ratio under certain Delta conditions</li> </ul> <p>Example: Relaxation of E/I in 2000 Ops plan = X af</p>
ACCESS TO SURPLUS PROJECT CAPACITY	<ul style="list-style-type: none"> <li>♦ Access to San Luis Reservoir and non-project capacity (i.e., Castaic, Eastside)</li> </ul>
MARKETS (WILLING SELLER)	<ul style="list-style-type: none"> <li>♦ Purchase of water for multiple purposes; provide incentives to sellers</li> <li>♦ Purchase of in-Delta water from willing sellers</li> <li>♦ Purchase PG&amp;E reoperation water and pay for foregone power production (30-100 kaf?)</li> </ul>
SHASTA DAM EXPANSION	<ul style="list-style-type: none"> <li>♦ Addition of flash boards on Shasta Dam would increase storage capacity by 50 TAF</li> </ul>
RIGHT TO BORROW SURPLUS STORAGE CAPACITY AND SURPLUS WATER	<ul style="list-style-type: none"> <li>♦ Borrow surplus storage from Arvin-Edison for San Joaquin River re-watering project</li> </ul>
CHANGE FLOOD CONTROL DIAGRAMS	<ul style="list-style-type: none"> <li>♦ May be limited to the San Joaquin and Stanislaus Rivers</li> <li>♦ Pursue other small-scale projects in Stage 1 in addition to above efforts (TNC has ideas for pilot projects)</li> <li>♦ Need to increase run-off prediction skill (watershed model)</li> <li>♦ Could improve reservoir use by relaxing flood fill curves on flood</li> </ul>

	operations
PUMPING TO STORAGE	<ul style="list-style-type: none"> <li>♦ Good general strategy for expansion of conjunctive use opportunities by optimizing use of groundwater/surface water Source Shifting</li> <li>♦ Would require additional facilities to maximize use otherwise benefits could be relatively small</li> <li>♦ Could result in spilling of stored water</li> <li>♦</li> </ul> <p>Specific proposals to examine for Stage 1:</p> <ol style="list-style-type: none"> <li>1. Tie Castaic storage to San Luis lowpoint</li> <li>2. Pump out to increase the likelihood of filling San Luis</li> </ol>
INTERTIE	<ul style="list-style-type: none"> <li>♦ DMC capacity less than pumping capacity (by 400cfs)</li> <li>♦ Need to determine real benefit of intertie when linked to other assets (i.e., JPOD, expanded Banks)</li> <li>♦ When tied to increasing Banks capacity construction/use of intertie becomes a staging issue</li> </ul>
RICE FIELD FLOODING	<ul style="list-style-type: none"> <li>♦ Could increase opportunities to spread water on fields, manage drainage to enhance instream flows if diversions were screened, water quality impacts not an issue, and dollars available for expansion</li> <li>♦ Limited integration into scenarios</li> </ul>
CVPIA: SHIFTING REFUGE SUPPLIES	<ul style="list-style-type: none"> <li>♦ Borrow water from refuges for EWA/WMS</li> <li>♦ Fund conservation measures without decreasing benefits to refuges</li> <li>♦ Use refuges as small-scale storage projects.</li> <li>♦ Shift conveyance to refuges to free-up space in DMC to convey WMS/EWA water.</li> <li>♦ Discuss above possibilities with DU, Grasslands, CWA</li> </ul>
TAKE LIMITS	<ul style="list-style-type: none"> <li>♦ Determine whether easy or difficult to apply flexibly</li> <li>♦ Identify other issues regarding flexing and application</li> </ul>
SUISUN GATE OPERATIONS	<ul style="list-style-type: none"> <li>♦ Determine whether easy or difficult to apply flexibly</li> <li>♦ Identify other issues regarding flexing and application</li> </ul>
REGULATORY FLEXIBILITY	<ul style="list-style-type: none"> <li>♦ X2</li> <li>♦ Take limits</li> </ul> <p>For each determine difficulty of applying flexibly, constraints, etc. and whether application as "asset" in Stage 1 is feasible/probable, etc.</p>
ERP	<ul style="list-style-type: none"> <li>♦ Integrate water acquired for ERP flows with WMS/EWA water</li> </ul>
ACQUISITION OF IN-DELTA ISLANDS FROM WILLING SELLERS	<ul style="list-style-type: none"> <li>♦ Reduce application and subsequent run-off/seepage of pesticides, etc., from in-Delta islands</li> </ul>
MANAGE DISCHARGE FROM IN-DELTA ISLANDS	<ul style="list-style-type: none"> <li>♦ Relocate Delta agricultural drains</li> </ul>
MANAGE SALINITY AND SELENIUM INPUTS	<ul style="list-style-type: none"> <li>♦ Relocate Delta agricultural drains</li> </ul>

DELTA CROSS CHANNEL	♦ Operate to freshen Delta
HOOD-MOKELUMNE CONNECTOR	♦ Operate pilot project to freshen Delta
OTHER WATER QUALITY ASSETS?	♦
CONTROL ALGAL GROWTH IN CCF	♦ ??